

REMARKS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1-6 are presently active in this case. The present Amendment amends Claims 1-6 without introducing any new matter; and cancels Claims 7-10 without prejudice or disclaimer.

The outstanding Office Action rejected Claims 1-10 under 35 U.S.C. § 103(a) as unpatentable over Masato (Japanese Patent Publication No. H63-073628) in view of Takahashi (Japanese Patent Publication No. H6-124873, hereinafter "Takahashi '873") or alternatively in view of Takahashi (U.S. Patent No. 5,610,683, hereinafter "Takahashi '683").

First, Applicants wish to thank Examiner Mathews for the courtesy of an interview granted to Applicants' representative Nikolaus P. Schibli, Ph.D., Reg. No. 56,994, on November 18, 2008, at which time the outstanding issues in this case were discussed. Arguments and claim changes similar to the ones developed hereinafter were presented and Examiner Mathews indicated that in light of the arguments he would perform a new prior art search, and would reconsider the outstanding grounds for rejection upon formal submission of a response.

In response, Claim 1 is amended to further recite a carrier station that can be loaded and unloaded by a carrier for substrates. This feature finds non-limiting support in Applicants' disclosure as originally filed, for example in Figs. 1-2, "carrier handling block," reference B1, and in the specification at p. 8, ll. 14-19. Moreover, independent Claim 1 is amended to further recite an interface block including a substrate transfer part and an inspection unit, a control unit, and a drying unit. These features find non-limiting support in Figs. 2-3, "interface block," reference B3, and in the specification at p. 9, l. 21, to p. 10, l. 14. In addition, the substrate transfer part finds non-limiting support by references 31A and 31B,

and in the specification at p. 11, ll. 19-29, and the inspection unit finds non-limiting support by reference 37, and in the specification at p. 10, ll. 6-10. No new matter has been added. Moreover, Claims 1-6 are amended to correct minor formal issues, and to change the dependent claims in accordance with the changes of independent Claim 1. In addition, Claims 7-10 are cancelled without prejudice or disclaimer.

In response to the rejections of Claims 1-6 under 35 U.S.C. § 103(a), Applicants respectfully request reconsideration of these rejections and traverse the rejections, as discussed next.

Briefly summarizing, Applicants' Claim 1 is directed to a coating and developing system. The system includes, a carrier station, a processing block, and ***an interface block including a substrate transfer part, an inspection unit, a control unit, and a drying unit***, the interface block disposed adjacent to the processing block and connected to an exposure system for performing an immersion exposure process to a substrate.

Moreover, the substrate transfer part of the interface block can receive the coated substrate from the processing block, send the coated substrate to the exposure system, receive the exposed substrate from the exposure system, and send the exposed substrate to the processing block. In addition, the inspection unit of the interface block includes a substrate support device for supporting the exposed substrate and a liquid detector, the detector can detect at least a liquid used for forming the liquid film and adhering to the surface of the substrate supported by the substrate support device.

The features of Applicants' independent Claim 1 provide for an interface block, located between processing block and an exposure system, that includes *inter alia* an inspection unit having a liquid detector, and a substrate transfer part. In the field of substrate processing, a user usually purchases a coating and developing apparatus from one manufacturer, and a exposure system from another manufacturer. This is due to the fact that

both apparatuses are made based on very different technologies. Some manufacturers of exposure systems therefore integrate a liquid detector and a dryer into the exposure apparatus. For example, see the EX-SYS apparatus. (Ohta et al., U.S. Patent Publication No. 2006/0257553, hereinafter “Ohta”.) In Ohta the exposure apparatus EX-SYS includes an imaging apparatus 80 to scan surfaces of a substrate P to detect liquid LQ on the substrate P, and a removal system 100 to remove the liquid LQ. (Ohta, p. 7, ¶¶ [0072]-[0073]).

However, the present invention as recited in Applicants’ Claim 1, the interface block including a substrate transfer part and an inspection unit having a liquid detector, so that the substrate can be inspected for liquid *before* entering the exposure system. Because the coating and developing apparatus can use various types of resists to coat the substrate, different types of exposure systems can be used to connect to the coating and developing apparatus, and some of them may not have a liquid detector and dryer. Therefore, the features of Claim 1 recites an interface block that includes a substrate transfer part and an inspection unit having a liquid detector, to have a more flexible system for easier configuration. Moreover, the present system allows to design the coating and development system to have a liquid detector that fits its requirements, and can be chosen by the user, without having to purchase a specific type of exposure system. Applicants submit that the above discussion is for explanatory purposes only, and is not intended to limit the scope of the claims in any fashion.

Turning now to the applied references, Masato is directed to method of washing and drying wafers, where a wafer is dried by a centrifugal force. (Masato, Abstract, Fig. 2). In Masato, the wafer is inspected by an optical system including a light emitter 7 and a photosensor 6, to detect reflected light, and an infrared thermal light emitter 10 is used to dry the substrate. (Id.) However, Masato is silent on the interface block including a substrate

transfer part and an inspection unit, and the arrangement of the interface block, as required by Applicants' Claim 1.

The reference Takahashi '683 is directed to a projection exposure apparatus for projecting patterns onto a substrate. (Takahashi '683, Abstract, Fig. 1.) But this reference also fails to teach an interface block including a substrate transfer part and an inspection unit, and the arrangement of the interface block, as required by Applicants' Claim 1. Moreover, the reference Takahashi '873 also fails to teach such a feature.

Therefore, even if the combination of Masato, Takahashi '683 and/or Takahashi '873 is assumed to be proper, the cited passages of the combination fails to teach every element of Applicants' Claim 1. Specifically, the combination fails to teach the claimed interface block. Accordingly, Applicants respectfully traverse, and request reconsideration of this rejection based on these references.

Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal Allowance. A Notice of Allowance for Claims 1-6 is earnestly solicited.

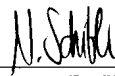
Should the Examiner deem that any further action is necessary to place this application in even better form for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the below listed telephone number.

Respectfully submitted,

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